

*AMENDMENTS TO THE CLAIMS*

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claim 1 (Cancelled).

2. (Currently Amended) The permanent-magnet synchronous motor according to claim ~~1~~ 20, wherein N is the positive minimum value of the values calculated from  ~~$N = p$ ,  $N = \pm 2 \times p - Z \times i1$  ( $i1$  is an integer and at least 0),  $N = \pm 2p - Z(i1)$ , and  $N = Z(i1 \pm 2)p$~~   $N = Z(i1) \pm 2p$ .

3. (Currently Amended) The permanent-magnet synchronous motor according to claim ~~1~~ 20, wherein the pressurizing part comprises a frame that fixes the stator core in position with respect to the frame and rotatably supports one end of the rotor.

Claims 4-19 (Cancelled).

20. (New) A permanent-magnet synchronous motor comprising:

a toroidal stator core having an outer periphery, a plurality of internal radial teeth, and Z slots, each slot separating a pair of teeth, and a coil arranged on the stator core, wherein Z is a natural number;

a rotor having permanent magnets with 2p poles, the rotor being disposed within the toroidal stator core, wherein p is a natural number; and

a pressurizing part that applies a local extreme pressure to the outer periphery of the toroidal stator core, radially inwardly, at each of N locations, wherein

N is any one of positive values of values chosen from values calculated from  $N = p$ ,  $N = \pm 2p - Z(i1)$ , and  $N = Z(i1) \pm 2p$ ,

il is an integer and at least 0, and  
the N locations are chosen so that each local extreme pressure applied is aligned with a center line of at least one of the radial teeth.

21. (New) A permanent-magnet synchronous motor comprising:  
a toroidal stator core having an outer periphery, a plurality of internal radial teeth, and Z slots, each slot separating a pair of teeth, and a coil arranged on the stator core, wherein Z is a natural number;  
a rotor having permanent magnets with 2p poles, the rotor being disposed within the toroidal stator core, wherein p is a natural number; and  
a pressurizing part that applies a local extreme pressure to the outer periphery of the toroidal stator core, radially inwardly, at each of N locations, wherein  
N is any one of positive values of values chosen from values calculated from  $N = p$ ,  $N = \pm 2p - Z(i1)$ , and  $N = Z(i1) \pm 2p$ ,  
il is an integer and at least 0, and  
the N locations are chosen so that each local extreme pressure applied is aligned with a center line of at least one of the slots.

22. (New) The permanent-magnet synchronous motor according to claim 21, wherein N is the positive minimum value of the values calculated from  $N = \pm 2p - Z(i1)$ , and  $Z(i1) \pm 2p$ .

23. (New) The permanent-magnet synchronous motor according to claim 21, wherein the pressurizing part comprises a frame that fixes the stator core in position with respect to the frame and rotatably supports one end of the rotor.